

What is claimed is:

1. An optical glass comprising:

optical constants which are a refractive index (nd) in a range of 1.70 to 1.75 and an Abbe number (vd) in a range of 45.0 to 54.0;

a glass transformation temperature (Tg) in a range of 500 to 580°C;

more than 5 to 15 mass % of SiO<sub>2</sub>;

20 to less than 30 mass % of B<sub>2</sub>O<sub>3</sub>;

a total amount of SiO<sub>2</sub> + B<sub>2</sub>O<sub>3</sub> being more than 25 to 40 mass %;

more than 21 to less than 30 mass % of La<sub>2</sub>O<sub>3</sub>;

more than 5 to 15 mass % of Y<sub>2</sub>O<sub>3</sub>;

0 to less than 10 mass % of Gd<sub>2</sub>O<sub>3</sub>;

1 to 8 mass % of ZrO<sub>2</sub>;

0.1 to 5 mass % of Nb<sub>2</sub>O<sub>5</sub>;

more than 5 to 12 mass % of Ta<sub>2</sub>O<sub>5</sub>;

a total amount of ZrO<sub>2</sub> + Nb<sub>2</sub>O<sub>5</sub> + Ta<sub>2</sub>O<sub>5</sub> being 7 to 20 mass %;

0 to 10 mass % of ZnO;

0 to 10 mass % of CaO;

0 to 5 mass % of SrO;

0 to 10 mass % of BaO;

a total amount of ZnO + CaO + SrO + BaO being 5 to 15 mass %;

1 to 8 mass % of Li<sub>2</sub>O;

0 to 1 mass % of  $\text{Sb}_2\text{O}_3$ ; and

0 to 1 mass % of  $\text{As}_2\text{O}_3$ ;

wherein the optical glass is substantially free of  $\text{Yb}_2\text{O}_3$  and  $\text{Al}_2\text{O}_3$ , and devitrification is not generated when the optical glass is kept at a temperature of  $920^\circ\text{C}$  for two hours.

2. The optical glass as claimed in claim 1, wherein the devitrification is not generated when the optical glass is kept at a temperature of the glass transformation temperature ( $T_g$ ) +  $80^\circ\text{C}$  for 30 minutes.

3. The optical glass as claimed in claim 1, wherein the devitrification is not generated when the optical glass is kept at a temperature of the glass transformation temperature ( $T_g$ ) +  $140^\circ\text{C}$  for 30 minutes.

4. The optical glass as claimed in claim 1, wherein the optical glass is substantially free of a fluorine, a  $\text{PbO}$ , a  $\text{WO}_3$  and an  $\text{SnO}_2$  components.

5. The optical glass as claimed in claim 2, wherein the optical glass is substantially free of a fluorine, a  $\text{PbO}$ , a  $\text{WO}_3$  and an  $\text{SnO}_2$  components.

6. The optical glass as claimed in claim 3,

wherein the optical glass is substantially free of a fluorine, a  $\text{PbO}$ , a  $\text{WO}_3$  and an  $\text{SnO}_2$  components.